# Bachechi Open Space Project Update – June 2010

#### Introduction

The design team of Bernalillo County Parks and Recreation, Sites Southwest, Bohannan-Huston, and Sam Sterling Architects has completed detailed construction plans and specifications for the Bachechi Open Space.

The Bachechi Open Space site is 27 acres. This acreage is comprised of 18 acres purchased from the Bachechi Family in 1999 and nine (9) acres at the southwest corner of Alameda and Rio Grande that Bernalillo County purchased earlier in the 1990s. This nine acre purchase occurred at the same time as the City's acquisition of eight (8) acres adjacent to the west. The City of Albuquerque's



Figure 1 - Bachechi and Alameda Open Space Properties

Alameda Open Space trailhead occupies these eight acres.

Together, these 35 acres as shown in **Figure 1** will function as an integrated Open Space site. Trails, native landscaping, an environmental education building, enhanced wildlife habitat, and other support facilities will complement the adjacent Rio Grande Bosque and trail. The Open Space program of the Bernalillo County Parks and Recreation Department is developing educational and resource-based recreation programming for the Bachechi property and will be implementing it once construction is completed in 2011.

Multiple systems and features of these two sites overlay each other and are summarized starting on page 2.

#### **Agency and Community Coordination**

Discussions and coordination toward the final detailed design of site systems and features have occurred in 2009 and thus far in 2010 with several departments, agencies, and neighborhoods, including the:

- New Mexico Department of Transportation
- New Mexico Environment Department

- United States Fish and Wildlife Service
- City of Albuquerque Open Space Division
- Albuquerque/Bernalillo County Water Utility Authority,
- Middle Rio Grande Conservancy District
- Bernalillo County Public Works Division
- Public Service Company of New Mexico
- Gas Company of New Mexico
- Bachechi family
- Alameda North Valley Association
- Rio Grande Estates Neighborhood Association

Bernalillo County appreciates the involvement of the Alameda/North Valley Association, Rio Grande Estates Neighborhood Association, the Bachechi family, and other members of the public in the programming and design phases that occurred in 2009 and 2010. This involvement and discourse, as well as the technical and functional requirements of site systems and features, have resulted in the construction design. Bernalillo County also appreciates the review and comment of draft designs by other agencies.

Site systems and features such as grading, drainage, new landscaping, existing landscaping, irrigation, expanded constructed wetland, trails, equestrian amenities, site structures, utilities, parking and access, and signage are outlined below. Imminent bidding, contract approvals, and project management arrangements also are explained.

## Construction Timeline - Request for Bids (RFB) and Project Management

A Request for Bids (RFB) was advertised May 30, 2010. County Commission authorization of the County Manager to execute a construction contract with the low bidder is scheduled for August 2010. A Notice to Proceed to the contractor is anticipated by early September 2010. Construction duration is expected to be approximately twelve (12) months. Bid documents also require prospective offerors to submit information about their experienced in undertaking comparable public sector recreation projects.

Carl "Chip" Berglund from the Bernalillo County Capital Improvement Program will serve as the Construction Project Manager once construction begins. Project management is being coordinated and transitioned as the design process ends and the bidding and construction begin.

### **Site Systems and Features**

## A. Grading and Drainage

The existing site is flat with minimal elevation changes. All storm flows will be retained on site through swales and landscaped depressions (**Figure 2**) and topographic differences will be achieved with landscaped berms on much of the perimeter of the Bachechi site. Water will also be harvested from all hardscape and the rooftops of the education and caretaker buildings and will be used to augment landscaping near these structures. No storm drain flows will leave the site. Cutting the land to create depressions will result in excess dirt to create the berms, particularly in the southern portion of the site.

### B. New Landscaping

Xeric vegetation will be planted throughout the site. Areas of concentration are the southern portion of the site, along the Alameda Boulevard frontage, around the Bellkeepers sculpture, around the education building, and near the Alameda Open Space parking lot. The plant list is too extensive to

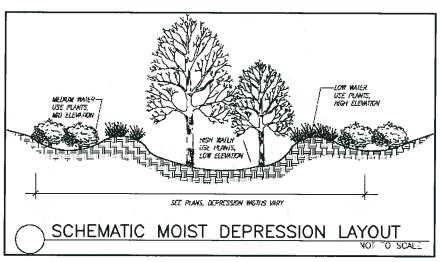


Figure 2 - Typical Landscaped Depression

list here, but will include large trees, buffer trees, wetland edge revegetation, small and medium trees, shrubs, perennials, ground covers, vines, and grasses. Approximately 3 acres of open field habitat will be planted in the central portion of the site with a perennial crop of bluestem, sacaton, lovegrass, and ricegrass designed to attract wildlife. Please contact Design Project Manager Clay Campbell at <a href="mailto:ccampbell@bernco.gov">ccampbell@bernco.gov</a> if you wish to see the detailed plant list.

## C. Existing Landscaping

- Pecan Orchard the Bachechi Family planted a pecan tree orchard in the late 1950s just north of the former house location. This orchard will have an additional 25 pecan trees planted, in an area with a slightly enlarged footprint, in a linear alignment recreating the original orchard.
- 2. Arboretum Just north of the Lane Lateral and the pecan orchard is the site of a former commercial nursery that ceased operation in the late 1980s. Bernalillo County acquired this property at the same time the City of Albuquerque acquired the adjacent land where the Alameda Open Space trailhead is now located. This commercial nursery has a variety of fruit trees, junipers, sycamores, and cottonwood trees that will be retained in an area to be known as the Arboretum.

This former nursery has been choked with varying sizes of Siberian Elms that have accumulated over the years and which are undesirable in such large quantities for the Arboretum. Open Space crews have removed many of the smaller elms, and the future contractor will also be selectively removing other elms while also planting new vegetation conducive to wildlife habitat. A vegetative buffer will remain along the Rio Grande Boulevard and Lane Lateral sides of this former commercial nursery. A few trails will be constructed in the Arboretum, creating spaces to observe both plant and animal life.

A careful approach is being taken to the Arboretum so that it is not drastically and suddenly removed of the majority of vegetation. After construction is completed,

Bernalillo County Open Space crews and the Open Space Coordinator will be working to refine this area with additional, selective removals and plantings. The Open Space coordinator will develop public programming centered on the Arboretum.

- 3. Larger Elm and Cottonwood Trees South of the Lane Lateral Some old elm trees in the immediate vicinity of the three future structures will have to be removed. Larger trees will have their trunks salvaged for use on the site as carved benches. Remaining removed or pruned material will be used for mulch. Site design has incorporated the existing cottonwood trees in the area where the former Bachechi home was located, and has retained the lone cottonwood tree near the southern boundary of the property.
- 4. Roses The Bachechi family had heirloom roses planted in front of their former home. Open Space crews, the Open Space Coordinator, and some members of the Albuquerque Rose Society worked carefully to transplant the roses in 2009 to a temporary location in the pecan orchard so that demolition of the house could occur. These roses survived and will be transplanted a final time into the Bachechi Family

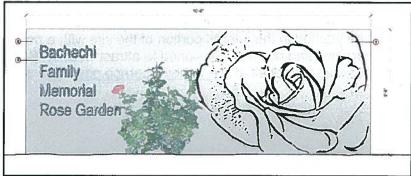


Figure 3 - Rose Garden Entrance Sign

Rose Memorial to be located just northwest of the former home location. Figure 3 shows the rose garden entrance sign.

# D. Irrigation

Landscape irrigation will come from the following sources: non-potable water, the Lane Lateral, on-site drainage storm water harvesting (swales and cisterns), and a sub-grade, organic and non-toxic hydrogel product (Figure 4). Non-potable water will irrigate the majority of the site through PVC lines and will be a source of irrigation augmentation, where

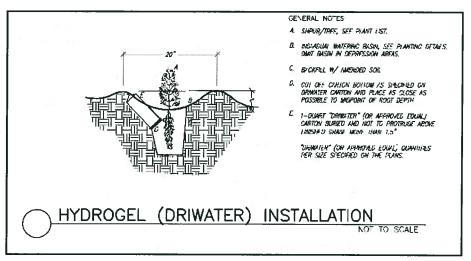


Figure 4 - Hydrogel Irrigation Method

necessary, to other areas. Quick couplers will be used as backup irrigation off the non-potable line, too. The Lane Lateral will provide flood irrigation to the Arboretum, pecan orchard, and the wildlife/agricultural field. A total of 3,100 gallons will be collected in cisterns from roof run-off at the education and caretakers' structures that will be diverted to adjacent landscaping. The hydro-gel product will be used to establish many of the plants and in the minimal landscaping to be added to the expanded Alameda parking lot. It relies on plants' capillary action that draws from the water/food grade ingredient mixture of the gel and balances the moisture and oxygen content in order to keep plants' roots from getting too wet or too dry. Hydro-gel packets need to be replaced a few times a year until plants get established. No runoff, leaching, or evaporation occurs. This irrigation method has been used successfully in redeveloped xeric landscapes elsewhere in Albuquerque.

# E. Expanded Constructed Wetland and Wildlife Blinds

City of Albuquerque Open Space constructed a wetland at this site several years ago. The wetland is supplied with water by the Lane Lateral and is a functional and attractive wildlife area. The constructed wetland will be enlarged by 7,900 square feet to the southeast to allow a portion of the boardwalk to span it so that visitors can be above the water. Two, and possibly three, additional wildlife blinds will be constructed at the northeast and western edges of the constructed wetland. Salvaged juniper poles from an East Mountain Open Space property will be incorporated into these viewing blinds so that they resemble a coyote fence. Viewing blinds will have openings at varying heights for wildlife viewing.

### F. Trails

Approximately two miles of varying and connected trail types and widths will be constructed or enhanced on the combined 35-acre site. These include:

- The existing, 10' wide multi-use paved asphalt trail leading to the Bosque from the Alameda/Rio Grande intersection;
- An 8' wide boardwalk approximately 153' in length along the eastern boundary of the constructed wetland. This boardwalk will connect the northern and southern portions of the site next to the education building;
- A 6' multi-use trail with stabilized crusher fines extending from the southern terminus
  of the boardwalk trail and comprising the majority of trail type in the southern portion
  of the site. See Figure 5 for this detail.
- A 6' equestrian trail made of mulched material adjacent to the paved asphalt trail and along the southern boundary of the site;
- A 4' walking trail made of mulched wood chips in the interior of the Arboretum.

Non-vehicular access to these trails will be available from:

- The northeast corner of the site near the Bellkeepers sculpture
- The east central portion of the site along Rio Grande Boulevard into the Arboretum
- The southeast corner of the site along Rio Grande
- The southwest corner of the site along the MRGCD clear ditch
- The west central portion of the site across the existing bridge over the MRGCD clear ditch

The northwest corner of the Alameda parking lot (existing)

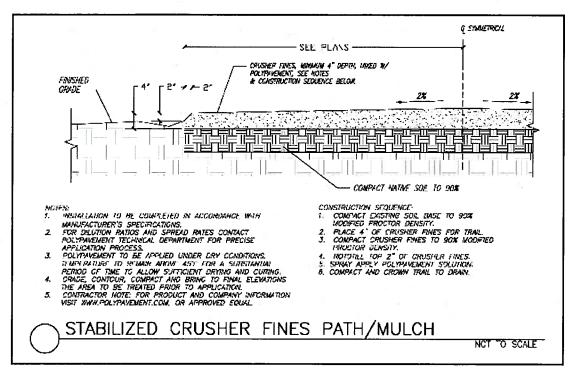


Figure 5 - Stabilized Crusher Fine Trail

The MRGCD would not allow a separate equestrian bridge to be constructed over the clear ditch to the west due to future levy reconstruction that they anticipate will be needed. The existing multiuse bridges over the clear ditch, one west of the ABCWUA raw water pump station and the other just north of Alameda Boulevard, will be the entrances to the Bosque trail as they are today. A small-scale pedestrian-only bridge will be built over the Lane Lateral allowing a connection between the northern and southern portions of the site. Maintenance vehicle access between the northern and southern portion of the site will occur via Rio Grande Boulevard.

### G. Equestrian Amenities

In addition to the on-site trails noted above that equestrians can use, two other additions tailored to equestrians will be constructed as shown in **Figure 6**.

A nine (9) space, equestrian-dedicated parking area will be built east of the existing Alameda Open Space parking lot. This lot is intended for trucks pulling equestrian trailers. These vehicles will enter the Alameda parking lot at its current ingress point and drive around the NMDOT storm drainage pond to reach this dedicated parking. Parking stalls will be long enough to accommodate a truck and trailer combination, and are oriented so that vehicles will be pointing toward the exit for ease of departure.

Across the paved trail from the equestrian dedicated parking lot will be an 80' diameter equestrian "round pen". Equestrians will be able to warm up and cool down their horses in this dedicated location. The footing mixture will be a blend of native soil and wood chips generated from on-site vegetation removal. Equestrians can then ride on a similar wood chip trail. adjacent to the existing paved trail, west to the Bosque. Equestrians can access the southern portion of the Bachechi site via the dirt trail adjacent to the MRGCD clear ditch and the

ABCWUA pump station on the west side of the property.

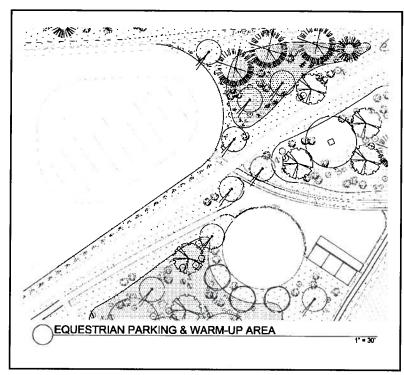


Figure 6 - Equestrian Parking & Warm-Up Round Pen

#### H. Site Structures

Three enclosed structures and one open structure are part of the construction plans.

- 1. Environmental Education Building A 2,000 square-foot education building will be sited just south of the Lane Lateral in the middle of the site. This space will have a multipurpose room where indoor programming, organized and coordinated by the County's Open Space Coordinator, can occur to accommodate approximately 40 participants. This room connects with an exterior patio overlooking the southwestern portion of the site. Mechanical, electrical, and plumbing systems are designed to be as efficient and sustainable as possible (natural light, photovoltaic panel, roof water harvesting) so that they, too, can be interpretative and educational elements of the site. Exterior-accessed restrooms are included. The building will not have regular operating hours, but rather will be used when Open Space programming and other community events and meetings need to be scheduled.
- 2. Maintenance Building An 800 square-foot maintenance building will be sited near Rio Grande Boulevard where the former Bachechi garage was located. It will have an exterior equipment storage yard to the west that will be screened with fencing and vine landscaping. The building exterior will be stucco with an ungalvanized corrugated metal roof. Though no cistern is part of this structure, roof water will be diverted to adjacent landscaping.
- 3. Outdoor Classroom This classroom is a circular, open-aired space south of the education building. Seating will accommodate approximately 30 participants and

will be made of stuccoed benches. Accommodations for electricity and an outdoor projection screen are provided. Poles will be erected so that a fabric shade cloth can be hung, when needed, to provide necessary shade.

4. Caretakers Unit – An 810 square-foot, one-bedroom caretakers unit will be built where the former Bachechi home was located. Simple and functional in its design, this building may initially serve as office space for County personnel until a caretaker is secured. The intent is to have some on-site security presence. No job description or positions have been approved for this caretaker, but this will be pursued during construction so that an occupant can be secured as soon as possible.

### I. Utilities

Non-potable irrigation water originates from a stub out in the northern portion of the site and will extend south across the Lane Lateral to irrigate a sizable portion of the site. All non-potable lines will use the required purple pipe and irrigation heads and small, simple "non-potable" water signs will be erected where the public might come in contact with this water.

Potable water, gas, and electrical service will enter the site off Rio Grande Boulevard near the former entrance to the Bachechi home. Sewer will exit the site in the same location. The education building will require a grinder pump for sewage since not enough elevation difference exists over the 400+ feet between the building and the sewer manhole in Rio Grande Boulevard. These utility line alignments will be under the emergency access route leading to the education building from Rio Grande Boulevard.

The education building's solar panels will be generating excess electricity that will also flow back out of the site through PNM lines.

### J. Parking and Access

Vehicular arrivals at the Bachechi Open Space will be required to park at the expanded Alameda Open Space parking lot (**Figure 7**). The network of on-site trails can lead pedestrians through the rest of the site, including to the education building. Once constructed, the Alameda Open Space parking lot will have 160 passenger vehicle spaces (including handicap parking) space for school bus parking along the southern edge, and nine (9) dedicated spaces for equestrian vehicles and trailers. The NMDOT and Bernalillo County Public Works have approved a Traffic Impact Analysis and will not require any off-site road improvements to Alameda or Rio Grande Boulevard.

Ten (10) parking spaces, including two handicap spaces, will be located near the education building with access off of Rio Grande Boulevard. These spaces will only be available for use when an activity or event is planned by, or in conjunction with, the Bernalillo County Open Space Coordinator. These spaces are expected to be used for staging, unloading, and loading when an event occurs in the education building. Patrons attending public events at this building will need to park at the Alameda Open Space parking lot. Simple lighting from the education building to this small parking lot will be provided.

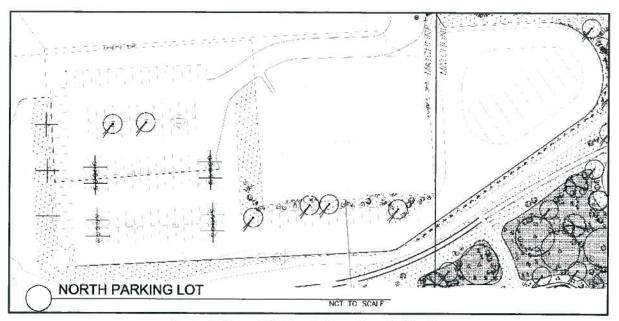


Figure 7 - Expanded Alameda Open Space Parking Lot

Emergency vehicle access to the buildings will be provided in this area via a crash-gate off Rio Grande Boulevard.

During construction, Bernalillo County, City of Albuquerque Open Space, and the future contractor will coordinate efforts so that disruption to the existing Alameda Open Space parking lot is minimized.

## K. Signage

A site of this size has multiple signage and information requirements. Information and rules need to be conveyed clearly at key locations without creating visual clutter. Five general sign types will be at the site.

 Property Entrance Signage – A combined County/City sign will be erected at the Alameda Open Space parking lot entrance. Bachechi-specific signs will be erected near the entry plaza entrance, education building, and one along Rio Grande Boulevard. These sign panels, their frames, and footings will be part of the construction contract.

Signage associated with the Bachechi Rose Memorial will also be part of the construction contract.

- Informational Signage These will be signs regarding "share the trail", "wildlife viewing", "pets on leash", etc. and come from the Manual of Uniform Traffic Control Devices (MUTCD). These sign panels, their frames, and footings will be part of a separate signage fabrication contract.
- 3. Wayfinding Signage These will be tailored signs at a handful of locations with a site map and a "you are here" symbol. These sign panels, their frames, and footings will be part of a separate signage fabrication contract.
- 4. Interpretive Signage These will be tailored signs with text and graphics largely prepared by the Open Space Coordinator and are intended to interpret a site

feature. Word length will not exceed 150 words. Sign frames, footings, and panel fabrication will be part of a separate signage fabrication contract.

The Open Space Coordinator is currently working on the wording and design of these sign panels, which will be procured separately by Bernalillo County under a signage RFP that will be issued in fall 2010. This RFP is needed by Bernalillo County Open Space, anyway, so future signs can be procured for other properties when needed. The interpretive sign panel for the Bellkeepers, written by Leroy Gurule and Jeff Potter of ANVA, will be procured with other interpretive signs.

 Regulatory Signage – Open Space rules and ordinance information will be on these signs. Sign frames, footings, and panel fabrication will be part of a separate signage fabrication contract.

# Project Contact Information:

- Design Project Manager: Clay Campbell, Planning Manager, Bernalillo County Parks and Recreation Department; 314-0400; <a href="mailto:ccampbell@bernco.gov">ccampbell@bernco.gov</a>
- Construction Project Manager: Chip Berglund, CIP Manager, Bernalillo County Capital Improvements Program, 468-1353; cberglund@bernco.gov

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